

**PATENT**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the **PATENT** of:

James A. Proctor, Jr.

**Patent No.:** 7,496,072

**Issued:** February 24, 2009

**Appln. No.:** 09/997,733

**Filed:** November 29, 2001

**Confirmation No.:** 4012

For: SYSTEM AND METHOD FOR  
CONTROLLING SIGNAL STRENGTH OVER  
A REVERSE LINK OF A CDMA WIRELESS  
COMMUNICATION SYSTEM

Our File: TAN-2-1403.06.US

Date: June 5, 2009

**REQUEST FOR CERTIFICATE OF CORRECTION**

Certificate of Corrections Branch  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

A Certificate of Correction under 35 U.S.C. §§ 254, 255 and 37 C.F.R. §§1.322, 1.323 is requested for U.S. Patent No. 7,496,072. Correction of the following errors is requested.

**Patentee:** James A. Proctor, Jr.  
**Patent No.:** 7,496,072

**ON THE FACE PAGE**

At section (56), U.S. PATENT DOCUMENTS, page 2, left column, after line beginning with “5,373,502”, delete “5,375,124 A 12/1994 D’Amgrogio et al.” and insert therefor --5,375,124 A 12/1994 D’Ambrogio et al.--.

At section (56), U.S. PATENT DOCUMENTS, page 2, left column, after line beginning with “5,758,288”, delete “5,781,542 A \* 7/1998 Ault et al. ... 370/342” and insert therefor --5,781,542 A \* 7/1998 Tanaka et al. ... 370/342--.

At section (56), U.S. PATENT DOCUMENTS, page 2, right column, after line beginning with “6,031,827”, delete “6,049,535 A \* 4/2000 Ozukturk et al. ... 370/335” and insert therefor --6,049,535 A \* 4/2000 Ozluturk et al. ... 370/335--.

At section (56), U.S. PATENT DOCUMENTS, page 3, left column, delete line beginning with “6,504,830” and insert therefor  
--6,504,830 B1 1/2003 Östberg et al. ... 370/342--.

At section (56), U.S. PATENT DOCUMENTS, page 3, left column, delete line beginning with “2002/0012332”, and insert therefor  
--2002/0012332 A1 1/2002 Tiedemann et al.--.

At section (56), OTHER PUBLICATIONS, page 3, right column, delete line 2, and insert therefor --cations Networks, Jun. 18, 1995--.

**Patentee:** James A. Proctor, Jr.  
**Patent No.:** 7,496,072

At section (56), OTHER PUBLICATIONS, page 3, right column, delete line beginning with “#531-981-20814-95C” and insert therefor  
--#531-981-20814-95C , part 2 on 3GPP2 website (<ftp://ftp.3gpp2.org/>--.

At section (56), OTHER PUBLICATIONS, page 4, at bottom of left column, insert

--Attachment 2, High Speed Data RLP Lucent Technologies, Version 0.1, January 16, 1997.

Azad et al., Multirate Spread Spectrum Direct Sequence CDMATechniques, 1994, The Institute of Electrical Engineers.

Data Service Options for Wideband Spread Spectrum Systems. TIA/EIA Interim Standard. TIA/EIA/IS-707-A. April 1999.

Data Service Options for Wideband Spread Spectrum Systems: Introduction, PN-3676.1 (to be published as TIA/EIA/IS-707.1), March 20, 1997 (Content Revision 1).

Data Services Option Standard for Wideband Spread Spectrum Digital Cellular System. TIA/EIA/IS-99. TIA/EIA Interim Standard. July 1995.

Data Services Options Standard for Wideband Spread Spectrum Systems: Packet Data Services. PN-3676.5 (to be published as TIA/EIA/IS-707.5)Ballot Version, May 30, 1997.

Ejzak, et al. Proposal for High Speed Packet Data Service, Version 0.1. Lucent Technologies, January 16, 1997.

**Patentee:** James A. Proctor, Jr.  
**Patent No.:** 7,496,072

Heine, Gunnar, "The Air-Interface of GSM", in GSM Networks: Protocols, Terminology, and Implementation, (MA: Artech House, Inc.), pp. 89-100 (1999).

Honkasalo, Harri. High Speed Data Air Interface. 1996.

Introduction to cdma2000 Spread Spectrum Systems, Release C. TIA/EIA Interim Standard. TIA/EIA/IS-2000.1-C. May, 2002.

Knisely, Douglas, N. Telecommunications Industry Association Subcommittee TR-45.5 - Wideband Spread Spectrum Digital Technologies Standards. Banff, Alberta. February 24, 1997 (TR45.5/97.02.24)21.

Knisely, Douglas, N. Telecommunications Industry Association Subcommittee TR-45.5 - Wideband Spread Spectrum Digital Technologies Standards, Working Group III-Physical Layer. Banff, Alberta. February 24, 1997 (TR45.5/97.02.24)22.

Melanchuk et al.. CDPD and Emerging Digital Cellular Systems, Digest of Papers of COMPCN, Computer Society Conference 1996, Santa Clara, CA, no. CONF. 41, February 25, 1996, pp. 2-8, XP000628458.

Motorola, Version 1.0. Motorola High Speed Data Air Interface Proposal Comparisons and Recommendations. January 27, 1997.

MSC-BS Interface (A-Interface) for Public 800 MHz. TIA/EIA/IS-634-A. TIA/EIA Interim Standard (Revision of TIA/EIA/IS-634) July 1998.

MSC-BS Interface for Public 800 MHz. TIA/EIA/IS-634. TIA/EIA Interim Standard, December 1995.

**Patentee:** James A. Proctor, Jr.  
**Patent No.:** 7,496,072

Ott, David TR45.5, CDMA WBSS Technical Standards Meeting Summary. February 24-28, 1997 Banff, Alberta.

Ovesjö Frederik, European Telecommunication Standard, SMG2 UMTS Physical Layer Expert Group, "UTRA Physical Layer Descriptions FDD parts" (v0.4, 1998-06-25), pp. 1-41, XP-002141421.

Physical Layer Standard for cdma2000 Spread Spectrum Systems, Release C. TIA/EIA Interim Standard. TIA.EIA/IS-2000.2C. May, 2002.

Shacham, et al., "A Selective-Repeat-ARQ Protocol for Parallel Channels and Its Resequencing Analysis," IEEE Transactions On Communications, XP000297814, 40 (4): 773-782 (Apr. 1997).

Simpson, W. (Editor). "RFC 1661 - The Point-to-Point Protocol (PPP)." Network Working Group, July 1994, pgs. 1-35. <http://www.faqs.org/rfcs/rfc1661.html>.

Simpson, W. (Editor). "RFC 1662 - PPP in HDLC-Like Framing." Network Working Group, July 1994, pgs. 1-17. <http://www.faqs.org/rfcs/rfc1662.html>.

Stage 1 Service Description for Data Services - High Speed Data Services (Version 0.10) CDG RF 38. December 3, 1996.

Support for 14.4 kbps Data Rate and PCS Interaction for Wideband Spread Spectrum Cellular Systems. TSB74, December 1995. TIA/EIA Telecommunications Systems Bulletin.

Telecommunications Industry Association Meeting Summary. Task Group I, Working

**Patentee:** James A. Proctor, Jr.  
**Patent No.:** 7,496,072

Group III, Subcommittee TR45.5. February 24-27, 1997. Banff, Alberta.

Telecommunications Industry Association Meeting Summary. Task Group I, Working Group III, Subcommittee TR45.5. January 6-8, 1997. Newport Beach, California.

Upper Layer (Layer 3) Signaling Standard for cdma2000 Spread Spectrum Systems, Release C. TIA/EIA Interim Standard. TIA/EIA/IS-2000.5-C. May, 2002.

WWW.CDG.ORG/NEWS/PRESS/1997.ASP. CDA Press Release Archive, 1997.--.

### **IN THE SPECIFICATION**

At column 2, line 21, after the word “Access” delete “(EDNA)” and insert therefor --(FDMA)--.

At column 3, delete lines 5-13, and insert therefor  
--In addition, the existing CDMA system requires certain operations before a channel can be used. Both access and traffic channels are modulated by so-called long code pseudonoise (PN) sequences; therefore, in order for the receiver to work properly it must first be synchronized with the transmitter. The setting up and tearing down of channels therefore requires overhead to perform such synchronization. This overhead results in a noticeable delay to the user of the subscriber unit.--.

At column 5, line 57, after the word “standard” delete “ISON” and insert therefor --ISDN--.

At column 6, line 58, before the word “these” delete “bands” and insert therefor --band--.

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At column 9, line 47, after “**400**,” delete “to” and insert therefor --or--.

**IN THE CLAIMS**

At claim 1, column 10, line 17, before the words “at least” insert --control--.

At claim 6, column 10, line 50, before the words “no data” delete “there is”.

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## **REMARKS**

Patentees believe that the above errors are of such a nature as to justify the issuance of a Certificate of Correction. Patentees have enclosed a completed Certificate of Correction Form PTO/SB/44.

Since at least one of the errors was caused by Applicants, please charge the surcharge fee pursuant to C.F.R. §1.20(a) of \$100.00 to the Deposit Account of InterDigital Communications Corporation, Deposit Account No. 09-0435.

Patentees respectfully request that the Certificate of Correction be issued.

Respectfully submitted,

James A. Proctor, Jr.

  
By /Joseph P. Gushue/  
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Registration No. 59,819  
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Philadelphia, PA 19103

JPG/emb

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| FORM PTO-1449<br><br>U.S. DEPARTMENT OF COMMERCE<br>PATENT AND TRADEMARK OFFICE<br><br>INFORMATION DISCLOSURE<br>STATEMENT BY APPLICANT<br><br>(Use several sheets if necessary) |  | ATTY. DOCKET NO.<br>TAN-2-1403.06.US | SERIAL NO.<br>09/997,733 |
|  |  | APPLICANT<br>James A. Proctor, Jr.   |                          |
|  |  | FILING DATE<br>November 29, 2001     | GROUP<br>2619            |



## U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | DOCUMENT NUMBER | DATE    | NAME              | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|------------------|-----------------|---------|-------------------|-------|----------|----------------------------|
| /V.H./           | 4,107,469       | 08/1978 | Jenkins           |       |          |                            |
|                  | 4,577,316       | 03/1986 | Schiff            |       |          |                            |
|                  | 4,625,308       | 11/1986 | Kim et al.        |       |          |                            |
|                  | 4,675,863       | 06/1987 | Paneth et al.     |       |          |                            |
|                  | 4,817,089       | 03/1989 | Paneth et al.     |       |          |                            |
|                  | 4,841,526       | 06/1989 | Wilson et al.     |       |          |                            |
|                  | 4,862,453       | 08/1989 | West et al.       |       |          |                            |
|                  | 4,866,709       | 09/1989 | West et al.       |       |          |                            |
|                  | 4,912,705       | 03/1990 | Paneth et al.     |       |          |                            |
|                  | 4,949,395       | 08/1990 | Rydbeck           |       |          |                            |
|                  | 5,022,024       | 06/1991 | Paneth et al.     |       |          |                            |
|                  | 5,027,348       | 06/1991 | Curry             |       |          |                            |
|                  | 5,027,400       | 06/1991 | Baji et al.       |       |          |                            |
|                  | 5,068,916       | 11/1991 | Harrison et al.   |       |          |                            |
|                  | 5,101,416       | 03/1992 | Fenton et al.     |       |          |                            |
|                  | 5,103,459       | 04/1992 | Gillhausen et al. |       |          |                            |
|                  | 5,114,375       | 05/1992 | Wellhausen et al. |       |          |                            |
|                  | 5,115,309       | 05/1992 | Hang              |       |          |                            |
|                  | 5,226,044       | 07/1993 | Gupta et al.      |       |          |                            |
|                  | 5,268,900       | 12/1993 | Hluchyj et al.    |       |          |                            |
|                  | 5,282,222       | 01/1994 | Fattouche et al.  |       |          |                            |
|                  | 5,325,419       | 06/1994 | Connolly et al.   |       |          |                            |
|                  | 5,353,332       | 10/1994 | Raith et al.      |       |          |                            |
| V                | 5,355,374       | 11/1994 | Hester et al.     |       |          |                            |
|                  | 5,373,502       | 12/1994 | Turban            |       |          |                            |

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| EXAMINER<br>/Venkatesh Haliyur/ | DATE CONSIDERED<br>09/17/2008 |
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|------------------|-----------------|---------|----------------------------|-------|----------|----------------------------|
| /V.H./           | 5,375,124       | 12/1994 | D'Ambrogio, et al.         |       |          |                            |
|                  | 5,388,102       | 02/1995 | Griffith et al.            |       |          |                            |
|                  | 5,394,473       | 02/1995 | Davidson                   |       |          |                            |
|                  | 5,412,429       | 05/1995 | Glover                     |       |          |                            |
|                  | 5,414,728       | 05/1995 | Zehavi                     |       |          |                            |
|                  | 5,442,625       | 08/1995 | Gitlin et al.              |       |          |                            |
|                  | 5,446,727       | 08/1995 | Bruckert et al.            |       |          |                            |
|                  | 5,463,629       | 10/1995 | Ko                         |       |          |                            |
|                  | 5,471,463       | 11/1995 | Hulbert                    |       |          |                            |
|                  | 5,481,533       | 01/1996 | Honig et al.               |       |          |                            |
|                  | 5,490,136       | 02/1996 | Sereno et al.              |       |          |                            |
|                  | 5,511,068       | 04/1996 | Sato                       |       |          |                            |
|                  | 5,559,789       | 09/1996 | Nakano et al.              |       |          |                            |
|                  | 5,581,575       | 12/1996 | Zehavi et al.              |       |          |                            |
|                  | 5,585,850       | 12/1996 | Schwaller                  |       |          |                            |
|                  | 5,586,119       | 12/1996 | Scribano et al.            |       |          |                            |
|                  | 5,590,409       | 12/1996 | Sawahashi et al.           |       |          |                            |
|                  | 5,592,470       | 01/1997 | Rudrapatna et al.          |       |          |                            |
|                  | 5,592,471       | 01/1997 | Briskman                   |       |          |                            |
|                  | 5,598,416       | 01/1997 | Yamada et al.              |       |          |                            |
|                  | 5,606,580       | 02/1997 | Mourot et al. <sup>1</sup> |       |          |                            |
|                  | 5,617,423       | 04/1997 | Li et al.                  |       |          |                            |
|                  | 5,619,492       | 04/1997 | Press et al.               |       |          |                            |
| ↓                | 5,619,524       | 04/1997 | Ling et al.                |       |          |                            |
|                  | 5,642,348       | 06/1997 | Barzegar et al.            |       |          |                            |

1 Corresponds to EP 0635949

|                                 |                               |
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|------------------|--|-----------------|---------|--------------------|-------|----------|----------------------------|
| /V.H./           |  | 5,642,377       | 06/1997 | Chung et al.       |       |          |                            |
|                  |  | 5,655,001       | 08/1997 | Cline et al.       |       |          |                            |
|                  |  | 5,657,358       | 08/1997 | Panech et al.      |       |          |                            |
|                  |  | 5,663,958       | 09/1997 | Ward               |       |          |                            |
|                  |  | 5,663,990       | 09/1997 | Bolgiano et al.    |       |          |                            |
|                  |  | 5,673,259       | 09/1997 | Quick, Jr.         |       |          |                            |
|                  |  | 5,687,194       | 11/1997 | Paneth et al.      |       |          |                            |
|                  |  | 5,689,502       | 11/1997 | Scott              |       |          |                            |
|                  |  | 5,697,059       | 12/1997 | Carney             |       |          |                            |
|                  |  | 5,699,364       | 12/1997 | Sato et al.        |       |          |                            |
|                  |  | 5,708,656       | 01/1998 | Noneman et al.     |       |          |                            |
|                  |  | 5,734,646       | 03/1998 | I et al.           |       |          |                            |
|                  |  | 5,742,592       | 04/1998 | Scholefield et al. |       |          |                            |
|                  |  | 5,745,484       | 04/1998 | Scott              |       |          |                            |
|                  |  | 5,758,288       | 05/1998 | Dunn et al.        |       |          |                            |
|                  |  | 5,781,542       | 07/1998 | Tanaka et al.      |       |          |                            |
|                  |  | 5,781,543       | 07/1998 | Ault et al.        |       |          |                            |
|                  |  | 5,784,406       | 07/1998 | DeJaco et al.      |       |          |                            |
|                  |  | 5,790,549       | 08/1998 | Dent               |       |          |                            |
|                  |  | 5,790,551       | 08/1998 | Chan               |       |          |                            |
|                  |  | 5,793,744       | 08/1998 | Kanerva et al.     |       |          |                            |
|                  |  | 5,802,046       | 09/1998 | Scott              |       |          |                            |
|                  |  | 5,802,465       | 09/1998 | Hamalainen et al.  |       |          |                            |
|                  |  | 5,812,131       | 09/1998 | Bertram            |       |          |                            |
|                  |  | 5,825,807       | 10/1998 | Kumar              |       |          |                            |
| ▼                |  | 5,828,659       | 10/1998 | Teder et al.       |       |          |                            |

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|------------------|--|-----------------|---------|-----------------------|-------|----------|----------------------------|
| /V.H./           |  | 5,828,662       | 10/1998 | Jalali et al.         |       |          |                            |
|                  |  | 5,841,768       | 11/1998 | Ozluturk et al.       |       |          |                            |
|                  |  | 5,844,894       | 12/1998 | Dent                  |       |          |                            |
|                  |  | 5,845,211       | 12/1998 | Roach                 |       |          |                            |
|                  |  | 5,854,786       | 12/1998 | Henderson et al.      |       |          |                            |
|                  |  | 5,856,971       | 01/1999 | Gitlin et al.         |       |          |                            |
|                  |  | 5,859,840       | 01/1999 | Tiedemann, Jr. et al. |       |          |                            |
|                  |  | 5,859,879       | 01/1999 | Bolgiano et al.       |       |          |                            |
|                  |  | 5,872,786       | 02/1999 | Shobatake             |       |          |                            |
|                  |  | 5,881,060       | 03/1999 | Morrow et al.         |       |          |                            |
|                  |  | 5,881,368       | 03/1999 | Grob et al.           |       |          |                            |
|                  |  | 5,884,196       | 03/1999 | Lekven et al.         |       |          |                            |
|                  |  | 5,894,473       | 04/1999 | Dent                  |       |          |                            |
|                  |  | 5,896,376       | 04/1999 | Alperovich et al.     |       |          |                            |
|                  |  | 5,898,929       | 04/1999 | Haartsen              |       |          |                            |
|                  |  | 5,910,944       | 06/1999 | Callicotte et al.     |       |          |                            |
|                  |  | 5,910,945       | 06/1999 | Garrison et al.       |       |          |                            |
|                  |  | 5,914,950       | 06/1999 | Tiedemann, Jr. et al. |       |          |                            |
|                  |  | 5,923,650       | 07/1999 | Chen et al.           |       |          |                            |
|                  |  | 5,930,230       | 07/1999 | Odenwalder et al.     |       |          |                            |
|                  |  | 5,950,131       | 09/1999 | Vilmur                |       |          |                            |
|                  |  | 5,956,332       | 09/1999 | Rasanen et al.        |       |          |                            |
|                  |  | 5,959,980       | 09/1999 | Scott                 |       |          |                            |
|                  |  | 5,966,374       | 10/1999 | Rasanen               |       |          |                            |
| ✓                |  | 5,991,279       | 11/1999 | Haugli et al.         |       |          |                            |
|                  |  | 6,001,800       | 12/1999 | Mehta et al.          |       |          |                            |

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|------------------|--|-----------------|---------|----------------------|-------|----------|----------------------------|
| /V.H./           |  | 6,002,690       | 12/1999 | Takayama et al.      |       |          |                            |
|                  |  | 6,005,855       | 12/1999 | Zehavi et al.        |       |          |                            |
|                  |  | 6,009,106       | 12/1999 | Rustad et al.        |       |          |                            |
|                  |  | 6,011,800       | 01/2000 | Nadgauda et al.      |       |          |                            |
|                  |  | 6,016,312       | 01/2000 | Storn et al.         |       |          |                            |
|                  |  | 6,028,868       | 02/2000 | Yeung et al.         |       |          |                            |
|                  |  | 6,031,827       | 02/2000 | Rikkinen et al.      |       |          |                            |
|                  |  | 6,049,535       | 04/2000 | Ozluturk             |       |          |                            |
|                  |  | 6,049,538       | 04/2000 | Scott                |       |          |                            |
|                  |  | 6,052,385       | 04/2000 | Kanerva et al.       |       |          |                            |
|                  |  | 6,058,338       | 05/2000 | Agashe et al.        |       |          |                            |
|                  |  | 6,064,678       | 05/2000 | Sindhushayana et al. |       |          |                            |
|                  |  | 6,069,880       | 05/1999 | Owen et al.          |       |          |                            |
|                  |  | 6,069,883       | 05/2000 | Ejzak et al.         |       |          |                            |
|                  |  | 6,078,572       | 06/2000 | Tanno et al.         |       |          |                            |
|                  |  | 6,081,536       | 06/2000 | Gorsuch et al.       |       |          |                            |
|                  |  | 6,088,335       | 07/2000 | I et al.             |       |          |                            |
|                  |  | 6,094,421       | 07/2000 | Scott                |       |          |                            |
|                  |  | 6,094,576       | 07/2000 | Häkkinen et al.      |       |          |                            |
|                  |  | 6,097,733       | 08/2000 | Basu et al.          |       |          |                            |
|                  |  | 6,101,176       | 08/2000 | Honkasalo et al.     |       |          |                            |
|                  |  | 6,104,708       | 08/2000 | Bergamo              |       |          |                            |
|                  |  | 6,111,863       | 08/2000 | Rostoker et al.      |       |          |                            |
|                  |  | 6,112,092       | 08/2000 | Benveniste           |       |          |                            |
| ↓                |  | 6,134,233       | 10/2000 | Kay                  |       |          |                            |
|                  |  | 6,151,332       | 11/2000 | Gorsuch et al.       |       |          |                            |

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| EXAMINER<br>/Venkatesh Haliyur/ | DATE CONSIDERED<br>09/17/2008 |
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|------------------|--|-----------------|---------|---------------------|-------|----------|----------------------------|
| /V.H./           |  | 6,157,619       | 12/2000 | Ozluturk et al.     |       |          |                            |
|                  |  | 6,161,013       | 12/2000 | Anderson et al.     |       |          |                            |
|                  |  | 6,163,707       | 12/2000 | Miller              |       |          |                            |
|                  |  | 6,169,731       | 01/2001 | Stewart et al.      |       |          |                            |
|                  |  | 6,196,362       | 02/2001 | Darcie et al.       |       |          |                            |
|                  |  | 6,198,723       | 03/2001 | Parruck et al.      |       |          |                            |
|                  |  | 6,208,871       | 03/2001 | Hall et al.         |       |          |                            |
|                  |  | 6,212,175       | 04/2001 | Harsch              |       |          |                            |
|                  |  | 6,214,342       | 04/2001 | Rege                |       |          |                            |
|                  |  | 6,215,798       | 04/2001 | Carneheim et al.    |       |          |                            |
|                  |  | 6,222,828       | 04/2001 | Ohlson et al.       |       |          |                            |
|                  |  | 6,222,832       | 04/2001 | Proctor             |       |          |                            |
|                  |  | 6,226,527       | 05/2001 | Dalsgaard et al.    |       |          |                            |
|                  |  | 6,233,439       | 05/2001 | Jalali              |       |          |                            |
|                  |  | 6,236,647       | 05/2001 | Amalfitano          |       |          |                            |
|                  |  | 6,243,372       | 06/2001 | Petch et al.        |       |          |                            |
|                  |  | 6,246,673       | 06/2001 | Tiedmann et al.     |       |          |                            |
|                  |  | 6,259,683       | 07/2001 | Sekine et al.       |       |          |                            |
|                  |  | 6,262,980       | 07/2001 | Leung et al.        |       |          |                            |
|                  |  | 6,263,013       | 07/2001 | Hendrickson         |       |          |                            |
|                  |  | 6,269,075       | 07/2001 | Tran                |       |          |                            |
|                  |  | 6,269,088       | 07/2001 | Masui et al.        |       |          |                            |
|                  |  | 6,272,168       | 08/2001 | Lomp et al.         |       |          |                            |
|                  |  | 6,285,665       | 09/2001 | Chuah               |       |          |                            |
| ↓                |  | 6,307,840       | 10/2001 | Wheatley III et al. |       |          |                            |
| ↓                |  | 6,310,859       | 10/2001 | Morita et al.       |       |          |                            |

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|------------------|--|-----------------|---------|-------------------|-------|----------|----------------------------|
| /V.H./           |  | 6,353,412       | 03/2002 | Soliman           |       |          |                            |
|                  |  | 6,356,555       | 03/2002 | Rakib             |       |          |                            |
|                  |  | 6,366,570       | 04/2002 | Bhagalia          |       |          |                            |
|                  |  | 6,366,786       | 04/2002 | Norman et al.     |       |          |                            |
|                  |  | 6,370,117       | 04/2002 | Koraitim et al.   |       |          |                            |
|                  |  | 6,373,830       | 04/2002 | Ozluturk          |       |          |                            |
|                  |  | 6,373,834       | 04/2002 | Lundh et al.      |       |          |                            |
|                  |  | 6,377,548       | 04/2002 | Chuah             |       |          |                            |
|                  |  | 6,377,809       | 04/2002 | Rezaifar et al.   |       |          |                            |
|                  |  | 6,388,999       | 05/2002 | Gorsuch et al.    |       |          |                            |
|                  |  | 6,389,000       | 05/2002 | Jou               |       |          |                            |
|                  |  | 6,396,804       | 05/2002 | Odenwalder        |       |          |                            |
|                  |  | 6,418,148       | 07/2002 | Kumar et al.      |       |          |                            |
|                  |  | 6,452,913       | 09/2002 | Proctor, Jr.      |       |          |                            |
|                  |  | 6,456,608       | 09/2002 | Lomp              |       |          |                            |
|                  |  | 6,469,991       | 10/2002 | Chuah             |       |          |                            |
|                  |  | 6,473,623       | 10/2002 | Benveniste        |       |          |                            |
|                  |  | 6,498,785       | 12/2002 | Derryberry et al. |       |          |                            |
|                  |  | 6,498,790       | 12/2002 | Shaheen et al.    |       |          |                            |
|                  |  | 6,504,830       | 01/2003 | Östberg et al.    |       |          |                            |
|                  |  | 6,519,452       | 02/2003 | Agostino et al.   |       |          |                            |
|                  |  | 6,519,651       | 02/2003 | Dillon            |       |          |                            |
|                  |  | 6,526,039       | 02/2003 | Dahlman et al.    |       |          |                            |
|                  |  | 6,526,064       | 02/2003 | Bousquet2         |       |          |                            |
| ▼                |  | 6,526,281       | 02/2003 | Gorsuch et al.    |       |          |                            |

2 Corresponds to FR 2761557

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|------------------|-----------------|---------|-----------------|-------|----------|----------------------------|
| /V.H./           | 6,532,365       | 03/2003 | Anderson et al. |       |          |                            |
|                  | 6,542,481       | 04/2003 | Foore et al.    |       |          |                            |
|                  | 6,545,986       | 04/2003 | Stellakis       |       |          |                            |
|                  | 6,545,994       | 04/2003 | Nelson et al.   |       |          |                            |
|                  | 6,567,416       | 05/2003 | Chuah           |       |          |                            |
|                  | 6,570,865       | 05/2003 | Masui et al.    |       |          |                            |
|                  | 6,571,296       | 05/2003 | Dillon          |       |          |                            |
|                  | 6,574,211       | 06/2003 | Padovani et al. |       |          |                            |
|                  | 6,597,913       | 07/2003 | Natarajan       |       |          |                            |
|                  | 6,687,509       | 02/2004 | Schmutz et al.  |       |          |                            |
|                  | 6,745,484       | 04/1998 | Scott           |       |          |                            |
|                  | 6,768,727       | 07/2004 | Sourour et al.  |       |          |                            |
|                  | 6,795,416       | 09/2004 | Han et al.      |       |          |                            |
|                  | 6,831,910       | 12/2004 | Moon et al.     |       |          |                            |
|                  | 2001/0038674    | 11/2001 | Trans           |       |          |                            |
|                  | 2002/0012332    | 05/2002 | Tiedmann et al. |       |          |                            |
|                  | 2003/0060224    | 03/2003 | Nelson et al.   |       |          |                            |
|                  | 2003/0123401    | 07/2003 | Dean            |       |          |                            |
|                  | 2004/0009785    | 01/2004 | Nelson et al.   |       |          |                            |
| ↓                | 2004/0160910    | 08/2004 | Gorsuch et al.  |       |          |                            |
|                  | 2004/0180696    | 09/2004 | Foore et al.    |       |          |                            |

## FOREIGN PATENT DOCUMENTS

| EXAMINER INITIAL | DOCUMENT NUMBER | DATE    | COUNTRY | CLASS | SUBCLASS | TRANSLATION |    |
|------------------|-----------------|---------|---------|-------|----------|-------------|----|
|                  |                 |         |         |       |          | YES         | NO |
| /V.H./           | 443061          | 08/1991 | EP      |       |          |             |    |
| /V.H./           | 526106          | 02/1993 | EP      |       |          |             |    |

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|                  |  |                 |         |         |       |          | YES         | NO |
| /V.H./           |  | 682423          | 11/1995 | EP      |       |          |             |    |
|                  |  | 682426          | 11/1995 | EP      |       |          |             |    |
|                  |  | 719062          | 06/1996 | EP      |       |          |             |    |
|                  |  | 720309          | 12/1995 | EP      |       |          |             |    |
|                  |  | 2326524         | 12/1998 | GB      |       |          |             |    |
|                  |  | 95/08900        | 03/1995 | WO      |       |          |             |    |
|                  |  | 96/08934        | 03/1996 | WO      |       |          |             |    |
|                  |  | 96/27994        | 12/1996 | WO      |       |          |             |    |
|                  |  | 96/37081        | 11/1996 | WO      |       |          |             |    |
|                  |  | 97/23073        | 06/1997 | WO      |       |          |             |    |
|                  |  | 97/26726        | 07/1997 | WO      |       |          |             |    |
|                  |  | 97/32412        | 09/1997 | WO      |       |          |             |    |
|                  |  | 97/46044        | 12/1997 | WO      |       |          |             |    |
|                  |  | 99/31811        | 06/1999 | WO      |       |          |             |    |
|                  |  | 99/52306        | 10/1999 | WO      |       |          |             |    |
| ▼                |  | 99/63682        | 12/1999 | WO      |       |          |             |    |

## OTHER DOCUMENTS

| EXAMINER INITIAL | DESCRIPTION (Including Author, Title, Date, Pertinent Pages, Etc.)   |
|------------------|--|
| /V.H./           | Attachment 2, <i>High Speed Data RLP</i> Lucent Technologies, Version 0.1, January 16, 1997.                         |
| /V.H./           | Azad et al., Multirate Spread Spectrum Direct Sequence CDMA Techniques, 1994, The Institute of Electrical Engineers. |
| /V.H./           | Bell Labs Technical Journal, Lucent Technologies, Volume 2, Number 3, Summer 1997.                                   |

|                                 |                               |
|---------------------------------|-------------------------------|
| EXAMINER<br>/Venkatesh Haliyur/ | DATE CONSIDERED<br>09/17/2008 |
|---------------------------------|-------------------------------|

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| EXAMINER INITIAL |  | DESCRIPTION (Including Author, Title, Date, Pertinent Pages, Etc.)  |
|------------------|--|---|
| /V.H./           |  | Budka et al., Cellular Digital Packet Data Networks, Bell Labs Technical Journal, Summer 1997, Pages 164-181.   |
|                  |  | Cellular Digital Packet Data, System Specification, Release 1.1, January 19, 1995.  |
|                  |  | Chih-Lin I et al., IS-95 Enhancements for Multimedia Services, Bell Labs Technical Journal, Pages 60-87, Autumn 1996.   |
|                  |  | Chih-Lin I et al., Load and Interference Based Demand Assignment (LIDA) for Integrated Services in CDMA Wireless Systems, November 18, 1996, Pages 235-241.                     |
|                  |  | Chih-Lin I et al., Multi-Code CDMA Wireless Personal Communications Networks, June 18, 1005.  |
|                  |  | Chih-Lin I et al., Performance of Multi-Code CDMA Wireless Personal Communications Networks, July 25, 1995.   |
|                  |  | Chih-Lin I et al., Variable Spreading Gain CDMA with Adaptive Control for True Packet Switching Wireless Network, 1995, Pages 725-730.  |
|                  |  | Chung, Packet Synchronization and Identification for Incremental Redundancy Transmission in FH-CDMA Systems, 1992, IEEE, Pages 292-295.   |
|                  |  | <i>Data Service Options for Wideband Spread Spectrum Systems.</i> TIA/EIA Interim Standard. TIA/EIA/IS-707-A. April 1999.   |
|                  |  | Data Service Options for Wideband Spread Spectrum Systems: Introduction, PN-3676. 1 (to be published as TIA/EIA/IS-707.1), March 20, 1997 (Content Revision 1).                 |
|                  |  | <i>Data Services Option Standard for Wideband Spread Spectrum Digital Cellular System.</i> TIA/EIA/IS-99. TIA/EIA Interim Standard. July 1995.                                  |
| ↓                |  | <i>Data Services Options Standard for Wideband Spread Spectrum Systems: Packet Data Services.</i> PN-3676.5 (to be published as TIA/EIA/IS-707.5) Ballot Version, May 30, 1997. |

|                                 |                               |
|---------------------------------|-------------------------------|
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|------------------|--|---|--|
| /V.H./           |  | Data Standard, Packet Data Section, PN-3676.5 (to be published as TIA/EIA/IS-DATA.5), December 8, 1996, Version 02 (Content Revision 03).   |  |
|                  |  | Draft Text for "95C" Physical Layer (Revision 4), Part 1, Document #531-981-20814-95C, Part 1 on 3GPP2 website ( <a href="ftp://ftp.3gpp2.org/tsgc/working/1998/1298_Maui/WG3-TG1/531-98120814-95c,%20part%201.pdf">ftp://ftp.3gpp2.org/tsgc/working/1998/1298_Maui/WG3-TG1/531-98120814-95c,%20part%201.pdf</a> ).       |  |
|                  |  | Draft Text for "95C" Physical Layer (Revision 4), Part 2, Document #531-981-20814-95C, part 2 on 3GPP2 website ( <a href="ftp://ftp.3gpp2.org/tsgc/working/1998/1298_Maui/WG3-TG1/531-98120814-95c,%20part%202.pdf">ftp://ftp.3gpp2.org/tsgc/working/1998/1298_Maui/WG3-TG1/531-98120814-95c,%20part%202.pdf</a> , 1998). |  |
|                  |  | Ejzak et al., Lucent Technologies Air Interface Proposal for CDMA High Speed Data Service, Revision 0.1, May 5, 1997.   |  |
|                  |  | Ejzak et al., Lucent Technologies Air Interface Proposal for CDMA High Speed Data Service, April 14, 1997.  |  |
|                  |  | Ejzak, et al. <i>Proposal for High Speed Packet Data Service, Version 0.1.</i> Lucent Technologies, January 16, 1997.   |  |
|                  |  | Elhakeem, Congestion Control in Signalling Free Hybrid ATM/CDMA Satellite Network, IEEE, 1995, Pages 783-787.   |  |
|                  |  | Hall et al., Design and Analysis of Turbo Codes on Rayleigh Fading Channels, IEEE Journal on Selected Areas in Communications, Vol. 16, No. 2, February 1998, Pages 160-174.  |  |
|                  |  | Heine, Gunnar, "The Air-Interface of GSM", in GSM Networks: Protocols, Terminology, and Implementation, (MA: Artech House, Inc.), pp. 89-100 (1999)   |  |
|                  |  | High Data Rate (HDR) Solution, Qualcomm, December 1998.   |  |
|                  |  | High Data Rate (HDR), cdmaOne optimized for high speed, high capacity data, Wireless Infrastructure, Qualcomm, September 1998.  |  |
| ✓                |  | Hindelang et al., Using Powerful "Turbo" Codes for 14.4 Kbit/s Data Service in GSM or PCS Systems, IEEE Global Communications Conference, Phoenix, Arizona, USA, November 3-8, 1997, Vol. II, Pages 649-653.  |  |

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|---------------------------------|-------------------------------|
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|------------------|--|---|
| N.H.             |  | Honkasalo, Harri. <i>High Speed Data Air Interface</i> . 1996.  |
|                  |  | <i>Introduction to cdma2000 Spread Spectrum Systems, Release C</i> . TIA/EIA Interim Standard. TIA/EIA/IS-2000.1-C. May, 2002.  |
|                  |  | Kaiser et al., Multi-Carrier CDMA with Iterative Decoding and Soft-Interference Cancellation, Proceedings of Globecom 1997, Vol. 1, Pages 523-529.  |
|                  |  | Knisely, Douglas, N. Telecommunications Industry Association Subcommittee TR-45.5 - <i>Wideband Spread Spectrum Digital Technologies Standards</i> . Banff, Alberta. February 24, 1997 (TR45.5/97.02.24)21.                                 |
|                  |  | Knisely, Douglas, N. Telecommunications Industry Association Subcommittee TR-45.5- Wideband Spread Spectrum Digital Technologies Standards, Working Group III-Physical Layer. Banff, Alberta. February 24, 1997 (TR45.5/97.02.24)22.        |
|                  |  | Knisely, Lucent Technologies Air Interface Proposal for CDMA High Speed Data Service, January 16, 1997.   |
|                  |  | Krzymien et al., Rapid Acquisition Algorithms for Synchronization of Bursty Transmissions in CDMA Microcellular and Personal Wireless Systems, IEEE Journal on Selected Areas in Communications, Vol. 14, No. 3, April 1996, Pages 570-579. |
|                  |  | Kumar et al, An Access Scheme for High Speed Packet Data Service on IS-95 based CDMA, February 11, 1997.  |
|                  |  | Lau et al., A Channel-State-Dependent Bandwidth Allocation scheme for Integrated Isochronous and Bursty Media Data in a Cellular Mobile Information System, IEEE, 2000, Pages 524-528.  |
|                  |  | Liu et al., Channel Access and Interference Issues in Multi-Code DS-CDMA Wireless Packet (ATM) Networks, Wireless Networks 2, Pages 173-196, 1996.  |
|                  |  | Lucent Technologies Presentation First Slide Titled, Summary of Multi-Channel Signaling Protocol, April 6, 1997.  |
| ↓                |  | Lucent Technologies Presentation First Slide Titled, Why Support Symmetric HSD (Phase 1C), February 21, 1997.   |

|                                 |                               |
|---------------------------------|-------------------------------|
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|---------------------------------|-------------------------------|

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|------------------|--|--|
| /V.H./           |  | Melanchuk et al. <i>CDPD and Emerging Digital Cellular Systems</i> , Digest of Papers of COMPCN, Computer Society Conference 1996, Santa Clara, CA, no. CONF. 41, February 25, 1996, pp. 2-8, XP000628458. |
|                  |  | Mobile Station-Base Station Compatibility Standard for Dual-Mode Wideband Spread Spectrum Cellular System, TIA Interim Standard, TIA/EIA/IS-95-A (Addendum to TIA/EIA/IS-95), May 1995.                    |
|                  |  | Mobile Station-Base Station Compatibility Standard for Wideband Spread Spectrum Cellular Systems, TIA/EIA Standard, TIA/EIA-95-B (Upgrade and Revision of TIA/EIA-95-A), March 1999.                       |
|                  |  | Motorola, Version 1.0. <i>Motorola High Speed Data Air Interface Proposal Comparisons and Recommendations</i> . January 27, 1997.  |
|                  |  | <i>MSC-BS Interface (A-Interface) for Public 800 MHz</i> . TIA/EIA/IS-634-A. TIA/EIA Interim Standard (Revision of TIA/EIA/IS-634) July 1998.  |
|                  |  | <i>MSC-BS Interface for Public 800 MHz</i> . TIA/EIA/IS-634. TIA/EIA Interim Standard, December 1995.  |
|                  |  | Network Wireless Systems Offer Business Unit (NWS OBU), Feature Definition Document for Code Division Multiple Access (CDMA) Packet Mode Data Services, FDD-1444, November 26, 1996.                       |
|                  |  | Ott, David TR45.5, CDMA WBSS Technical Standards Meeting Summary. February 24-28, 1997 Banff, Alberta.   |
|                  |  | Ovesjö Frederik, European Telecommunication Standard, SMG2 UMTS physical Layer Expert Group, "UTRA Physical Layer Descriptions FDD parts" (v0.4, 1998-06-25), pp. 1-41, XP-002141421.                      |
|                  |  | Packet Data Service Option Standard for Wideband Spread Spectrum Systems, TIA/EIA Interim Standard, TIA/EIA/IS-657, July 1996.   |
|                  |  | <i>Physical Layer Standard for cdma2000 Spread Spectrum Systems, Release C</i> . TIA/EIA Interim Standard. TIA/EIA/IS-2000.2C. May, 2002.  |
| ↓                |  | Puleston, PPP Protocol Spoofing Control Protocol, Global Village Communication (UK) Ltd., February 1996.   |

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|---------------------------------|-------------------------------|
| EXAMINER<br>/Venkatesh Haliyur/ | DATE CONSIDERED<br>09/17/2008 |
|---------------------------------|-------------------------------|

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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| FORM PTO-1449  |  | ATTY. DOCKET NO.<br>TAN-2-1403.06.US | SERIAL NO.<br>09/997,733 |
| U.S. DEPARTMENT OF COMMERCE<br>PATENT AND TRADEMARK OFFICE |  | APPLICANT<br>James A. Proctor, Jr.   |                          |
| INFORMATION DISCLOSURE<br>STATEMENT BY APPLICANT           |  | FILING DATE<br>November 29, 2001     | GROUP<br>2619            |
| (Use several sheets if necessary)                          |  |                                      |                          |

| EXAMINER INITIAL |  | DESCRIPTION (Including Author, Title, Date, Pertinent Pages, Etc.)   |  |
|------------------|--|--|--|
| /V.H./           |  | Reed et al., Iterative Multiuser Detection for CDMA with FEC: Near-Single-User Performance, IEEE Transactions on Communications, Vol. 46, No. 12, December 1998, Pages 1693-1699.                            |  |
|                  |  | Shacham, et al., "A Selective-Repeat-ARQ Protocol for Parallel Channels and Its Resequencing Analysis," IEEE Transactions On Communications, XP000297814, 40 (4): 773-782 (Apr. 1997).                       |  |
|                  |  | Simpson, W. (Editor). "RFC 1661 - The Point-to-Point Protocol (PPP)." Network Working Group, July 1994, pgs. 1-35. <a href="http://www.faqs.org/rfcs/rfc1661.html">http://www.faqs.org/rfcs/rfc1661.html</a> |  |
|                  |  | Simpson, W. (Editor). "RFC 1662 - PPP in HDLC-Like Framing." Network Working Group, July 1994, pgs. 1-17. <a href="http://www.faqs.org/rfcs/rfc1662.html">http://www.faqs.org/rfcs/rfc1662.html</a>          |  |
|                  |  | Skinner et al., Performance of Reverse-Link Packet Transmission in Mobile Cellular CDMA Networks, IEEE, 2001, Pages 1019-1023.   |  |
|                  |  | Stage 1 Service Description for Data Services - High Speed Data Services (Version 0.10) CDG RF 38. December 3, 1996.   |  |
|                  |  | <i>Support for 14.4 kbps Data Rate and PCS Interaction for Wideband Spread Spectrum Cellular Systems.</i> TSB74, December 1995. TIA/EIA Telecommunications Systems Bulletin.                                 |  |
|                  |  | <i>Telecommunications Industry Association Meeting Summary.</i> Task Group I, Working Group III, Subcommittee TR45.5. February 24-27, 1997. Banff, Alberta.  |  |
|                  |  | <i>Telecommunications Industry Association Meeting Summary.</i> Task Group I, Working Group III, Subcommittee TR45.5. January 6-8, 1997. Newport Beach, California.  |  |
|                  |  | <i>Upper Layer (Layer 3) Signaling Standard for cdma2000 Spread Spectrum Systems, Release C.</i> TIA/EIA Interim Standard. TIA/EIA/IS-2000.5-C. May, 2002.   |  |
|                  |  | Viterbi, The Path to Next Generation Services with CDMA, Qualcomm Incorporated, 1998 CDMA Americas Congress, Los Angeles, California, November 19, 1998.   |  |
| ✓                |  | Wang et al., The Performance of Turbo-Codes in Asynchronous DS-CDMA, IEEE Global Communications Conference, Phoenix, Arizona, USA, November 3-8, 1007, Gol. III, Pages 1548-1551.                            |  |

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|---------------------------------|-------------------------------|
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|  | APPLICANT<br>James A. Proctor, Jr.   |                          |
|  | FILING DATE<br>November 29, 2001     | GROUP<br>2619            |

| EXAMINER INITIAL |  | DESCRIPTION (Including Author, Title, Date, Pertinent Pages, Etc.)       |
|------------------|--|--|
| /V.H./           |  | <u>WWW.CDG.ORG/NEWS/PRESS/1997.ASP. CDA Press Release Archive, 1997.</u> |

09/17/2008

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**UNITED STATES PATENT AND TRADEMARK OFFICE**  
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Page 1 of 5

PATENT NO. : 7,496,072

APPLICATION NO.: 09/997,733

ISSUE DATE : February 24, 2009

INVENTOR(S) : James A. Proctor Jr.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

**ON THE FACE PAGE**

At section (56), U.S. PATENT DOCUMENTS, page 2, left column, after line beginning with "5,373,502", delete "5,375,124 A 12/1994 D'Amgrogio et al." and insert therefor --5,375,124 A 12/1994 D'Ambrogio et al.--.

At section (56), U.S. PATENT DOCUMENTS, page 2, left column, after line beginning with "5,758,288", delete "5,781,542 A \* 7/1998 Ault et al. ... 370/342" and insert therefor --5,781,542 A \* 7/1998 Tanaka et al. ... 370/342--.

At section (56), U.S. PATENT DOCUMENTS, page 2, right column, after line beginning with "6,031,827", delete "6,049,535 A \* 4/2000 Ozukturk et al. ... 370/335" and insert therefor --6,049,535 A \* 4/2000 Ozluturk et al. ... 370/335--.

At section (56), U.S. PATENT DOCUMENTS, page 3, left column, delete line beginning with "6,504,830" and insert therefor --6,504,830 B1 1/2003 Östberg et al. ... 370/342--.

At section (56), U.S. PATENT DOCUMENTS, page 3, left column, delete line beginning with "2002/0012332", and insert therefor --2002/0012332 A1 1/2002 Tiedemann et al.--.

At section (56), OTHER PUBLICATIONS, page 3, right column, delete line 2, and insert therefor --cations Networks, Jun. 18, 1995--.

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Page 2 of 5

PATENT NO. : 7,496,072

APPLICATION NO.: 09/997,733

ISSUE DATE : February 24, 2009

INVENTOR(S) : James A. Proctor Jr.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

At section (56), OTHER PUBLICATIONS, page 3, right column, delete line beginning with "#531-981-20814-95C" and insert therefor  
--#531-981-20814-95C , part 2 on 3GPP2 website (ftp://ftp.3gpp2.org/--).

At section (56), OTHER PUBLICATIONS, page 4, at bottom of left column, insert  
--Attachment 2, High Speed Data RLP Lucent Technologies, Version 0.1, January 16, 1997.  
Azad et al., Multirate Spread Spectrum Direct Sequence CDMA Techniques, 1994, The Institute of Electrical Engineers.

Data Service Options for Wideband Spread Spectrum Systems. TIA/EIA Interim Standard.  
TIA/EIA/IS-707-A. April 1999.

Data Service Options for Wideband Spread Spectrum Systems: Introduction, PN-3676.1 (to be published as TIA/EIA/IS-707.1), March 20, 1997 (Content Revision 1).

Data Services Option Standard for Wideband Spread Spectrum Digital Cellular System. TIA/EIA/IS-99.  
TIA/EIA Interim Standard. July 1995.

Data Services Options Standard for Wideband Spread Spectrum Systems: Packet Data Services.  
PN-3676.5 (to be published as TIA/EIA/IS-707.5)Ballot Version, May 30, 1997.

Ejzak, et al. Proposal for High Speed Packet Data Service, Version 0.1. Lucent Technologies, January 16, 1997.

Heine, Gunnar, "The Air-Interface of GSM", in GSM Networks: Protocols, Terminology, and Implementation, (MA: Artech House, Inc.), pp. 89-100 (1999).

Honkasalo, Harri. High Speed Data Air Interface. 1996.

Introduction to cdma2000 Spread Spectrum Systems, Release C. TIA/EIA Interim Standard.  
TIA/EIA/IS-2000.1-C. May, 2002.

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Philadelphia, PA 19103

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Page 3 of 5

PATENT NO. : 7,496,072

APPLICATION NO.: 09/997,733

ISSUE DATE : February 24, 2009

INVENTOR(S) : James A. Proctor Jr.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Knisely, Douglas, N. Telecommunications Industry Association Subcommittee TR-45.5 - Wideband Spread Spectrum Digital Technologies Standards. Banff, Alberta. February 24, 1997 (TR45.5/97.02.24) 21.

Knisely, Douglas, N. Telecommunications Industry Association Subcommittee TR-45.5 - Wideband Spread Spectrum Digital Technologies Standards, Working Group III-Physical Layer. Banff, Alberta. February 24, 1997 (TR45.5/97.02.24)22.

Melanchuk et al.. CDPD and Emerging Digital Cellular Systems, Digest of Papers of COMPCN, Computer Society Conference 1996, Santa Clara, CA, no. CONF. 41, February 25, 1996, pp. 2-8, XP000628458.

Motorola, Version 1.0. Motorola High Speed Data Air Interface Proposal Comparisons and Recommendations. January 27, 1997.

MSC-BS Interface (A-Interface) for Public 800 MHz. TIA/EIA/IS-634-A. TIA/EIA Interim Standard (Revision of TIA/EIA/IS-634) July 1998.

MSC-BS Interface for Public 800 MHz. TIA/EIA/IS-634. TIA/EIA Interim Standard, December 1995. Ott, David TR45.5, CDMA WBSS Technical Standards Meeting Summary. February 24-28, 1997 Banff, Alberta.

Ovesjö Frederik, European Telecommunication Standard, SMG2 UMTS Physical Layer Expert Group, "UTRA Physical Layer Descriptions FDD parts" (v0.4, 1998-06-25), pp. 1-41, XP-002141421.

Physical Layer Standard for cdma2000 Spread Spectrum Systems, Release C. TIA/EIA Interim Standard. TIA.EIA/IS-2000.2C. May, 2002.

Shacham, et al., "A Selective-Repeat-ARQ Protocol for Parallel Channels and Its Resequencing Analysis," IEEE Transactions On Communications, XP000297814, 40 (4): 773-782 (Apr. 1997).

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**UNITED STATES PATENT AND TRADEMARK OFFICE**  
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Page 4 of 5

PATENT NO. : 7,496,072

APPLICATION NO.: 09/997,733

ISSUE DATE : February 24, 2009

INVENTOR(S) : James A. Proctor Jr.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Analysis," IEEE Transactions On Communications, XP000297814, 40 (4): 773-782 (Apr. 1997).  
 Simpson, W. (Editor). "RFC 1661 - The Point-to-Point Protocol (PPP)." Network Working Group, July 1994, pgs. 1-35. <http://www.faqs.org/rfcs/rfc1661.html>.  
 Simpson, W. (Editor). "RFC 1662 - PPP in HDLC-Like Framing." Network Working Group, July 1994, pgs. 1-17. <http://www.faqs.org/rfcs/rfc1662.html>.  
 Stage 1 Service Description for Data Services - High Speed Data Services (Version 0.10) CDG RF 38. December 3, 1996.  
 Support for 14.4 kbps Data Rate and PCS Interaction for Wideband Spread Spectrum Cellular Systems. TSB74, December 1995. TIA/EIA Telecommunications Systems Bulletin.  
 Telecommunications Industry Association Meeting Summary. Task Group I, Working Group III, Subcommittee TR45.5. February 24-27, 1997. Banff, Alberta.  
 Telecommunications Industry Association Meeting Summary. Task Group I, Working Group III, Subcommittee TR45.5. January 6-8, 1997. Newport Beach, California.  
 Upper Layer (Layer 3) Signaling Standard for cdma2000 Spread Spectrum Systems, Release C. TIA/EIA Interim Standard. TIA/EIA/IS-2000.5-C. May, 2002.  
[WWW.CDG.ORG/NEWS/PRESS/1997.ASP](http://WWW.CDG.ORG/NEWS/PRESS/1997.ASP). CDA Press Release Archive, 1997.--.

**IN THE SPECIFICATION**

At column 2, line 21, after the word "Access" delete "(EDNA)" and insert therefor  
--(FDMA)--.

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Page 5 of 5

PATENT NO. : 7,496,072

APPLICATION NO.: 09/997,733

ISSUE DATE : February 24, 2009

INVENTOR(S) : James A. Proctor Jr.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

At column 3, delete lines 5-13, and insert therefor --In addition, the existing CDMA system requires certain operations before a channel can be used. Both access and traffic channels are modulated by so-called long code pseudonoise (PN) sequences; therefore, in order for the receiver to work properly it must first be synchronized with the transmitter. The setting up and tearing down of channels therefore requires overhead to perform such synchronization. This overhead results in a noticeable delay to the user of the subscriber unit.--.

At column 5, line 57, after the word "standard" delete "ISON" and insert therefor --ISDN--.

At column 6, line 58, before the word "these" delete "bands" and insert therefor --band--.

At column 9, line 47, after "400," delete "to" and insert therefor --or--.

**IN THE CLAIMS**

At claim 1, column 10, line 17, before the words "at least" insert --control--.

At claim 6, column 10, line 50, before the words "no data" delete "there is".

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